

CLAIMS:

1. A patient support apparatus configured to support a patient, the patient support system comprising,

a patient support including a bedframe and a mattress supported by the bedframe, and

a propulsion system including a propulsion device configured to contact the floor to power movement of the patient support and a coupler configured to pivotably and detachably couple the propulsion device to the bedframe of the patient support.

2. The patient support apparatus of claim 1, wherein the propulsion device pivots about a vertical axis of rotation relative to the bedframe of the patient support.

3. The patient support apparatus of claim 1, wherein the coupler includes a ball sized to fit within a socket positioned on the bedframe.

4. The patient support apparatus of claim 1, wherein the propulsion device includes a frame coupled to the coupler and a motorized wheel coupled to the frame and the coupler is positioned between the frame and the bedframe.

5. The patient support apparatus of claim 1, wherein the coupler is configured to move in a vertical direction relative to the propulsion device to couple and uncouple from the bedframe.

6. The patient support apparatus of claim 1, wherein the patient support includes a longitudinal axis and the propulsion system is pivotably to a first position urging the patient support in a longitudinal direction and a second position urging the patient support in a lateral direction.

7. The patient support apparatus of claim 1, wherein the propulsion device includes a frame and a motorized wheel coupled to the frame, and a plurality of wheels coupled to the frame and adapted to permit rolling of the propulsion device from the patient support to another patient support.

8. A propulsion system configured to move a patient support, the propulsion system comprising

a propulsion device adapted to contact the floor to power movement of the patient support and

a coupler configured to detachably couple the propulsion device to the patient support, the coupler including a first member adapted to couple the patient support at first distance from the floor and a second member adapted to couple the patient support at a second distance from the floor that is greater than the first distance.

5           9.       The propulsion system of claim 8, wherein the first member is adapted to couple to a patient restraint board of the patient support and the second member is adapted to couple to a base frame of the patient support.

10           10.       The propulsion system of claim 8, further comprising a vertically extending handle, wherein the propulsion device includes a frame and a motorized wheel coupled to the frame, and the vertically extending handle is coupled to the frame, and the first member is coupled to the vertically extending handle.

15           11.       The propulsion system of claim 10, wherein the first member is slidably coupled to the vertically extending handle.

          12.       The propulsion system of claim 8, wherein the second member is hook-shaped and adapted to hook onto a bedframe of the patient support.

          13.       The propulsion system of claim 12, wherein the first member is hook-shaped and adapted to hook onto a patient restraint board of the patient support.

20           14.       The propulsion system of claim 8, further comprising a frame and a plurality of wheels coupled to the frame, wherein the propulsion device is coupled to the frame and the plurality of wheels are adapted to permit rolling of the propulsion system from one patient support to another.

          15.       The propulsion system of claim 14, further comprising a handle coupled to the frame to permit pushing of the propulsion system by a user.

25           16.       A propulsion system configured to move a patient support having a patient restraint board, the propulsion system comprising

          a propulsion device configured to contact the floor to power movement of the patient support and

          a coupler configured to couple the propulsion device to the patient support, the coupler being adapted to be coupled to the patient restraint board.

17. The propulsion system of claim 16, wherein the coupler is adapted to couple to a base frame of the patient support.

18. The propulsion system of claim 16, wherein the propulsion device includes a frame, a motorized wheel coupled to the frame, and a vertically extending handle, and the coupler includes a first member adapted to be coupled to the patient restraint board and the vertically extending handle.

19. The propulsion system of claim 18, wherein the vertically extending handle extends from the frame to the patient restraint board.

20. The propulsion system of claim 16, wherein the coupler is adapted to couple to a top edge of the patient restraint board.

21. A propulsion system configured to move a patient support having a bedframe and mattress supported by the bedframe, the propulsion system comprising a propulsion device adapted to contact the floor to power movement of the patient support,

a coupler configured to move between a coupled position coupling the propulsion device to the bedframe and an uncoupled device permitting movement of the propulsion device away from the bedframe, and

a vertically extending handle coupled to the coupler and configured to move the coupler between the coupled and uncoupled positions.

22. The propulsion system of claim 21, wherein the handle includes a handle portion positioned at a sufficient height above the floor to facilitate grasping of the handle portion by user to move the propulsion system about a care facility.

23. The propulsion system of claim 21, wherein the propulsion device includes a frame and a drive wheel coupled to the frame and the handle is pivotably coupled to the frame.

24. The propulsion system of claim 21, further comprising a linkage system configured to couple the handle to the coupler.

25. The propulsion system of claim 24, wherein the linkage system includes a first link pivotably coupled to the handle and a second link coupled to the coupler and pivotably coupled to the first link.

26. The propulsion system of claim 21, wherein the coupler is hook shaped.

27. The propulsion system of claim 21, wherein the coupler is ball shaped to fit within a socket of the patient support.

5 28. The propulsion system of claim 21, further comprising a latch configured to hold the handle in at least one of the coupling and uncoupling positions.

29. The propulsion system of claim 21, further comprising a plurality of wheels configured to permit a user pushing on the handle to roll the propulsion system from one patient support to another.

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